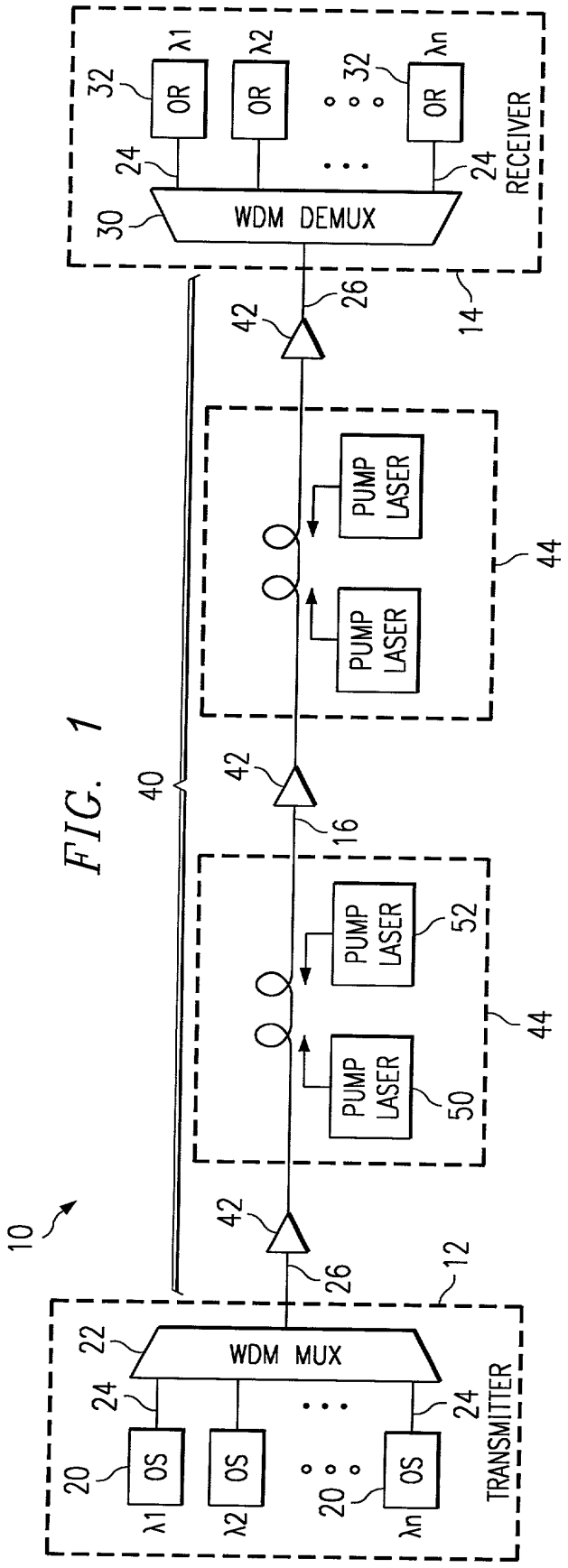

10
12
TRANSMITTER
WDM MUX
22
24
20
OS
λ1
λ2
λn
26
42
40
16
14
RECEIVER
WDM DEMUX
30
32
OR
44
PUMP LASER
50
52

FIG. 1

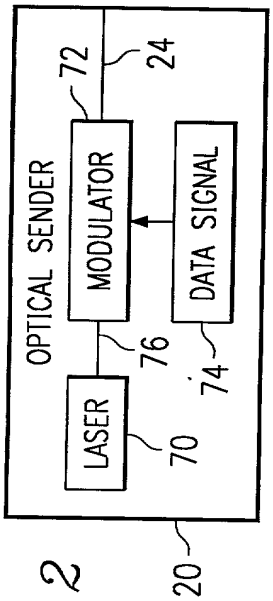

OPTICAL SENDER
MODULATOR
DATA SIGNAL
LASER
20
24
70
72
74
76

FIG. 2

FIG. 3A

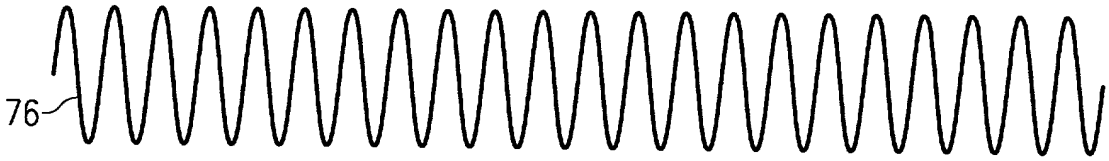


FIG. 3B

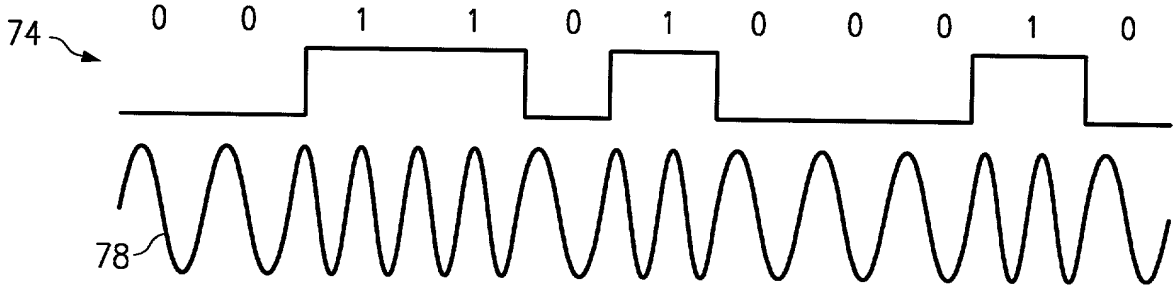


FIG. 3C

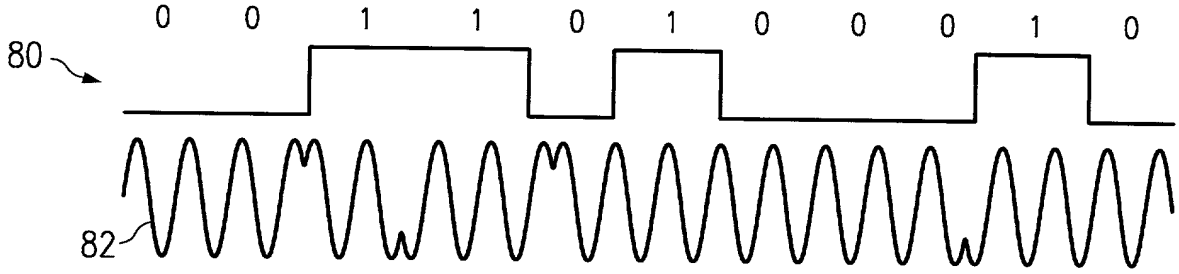


FIG. 4

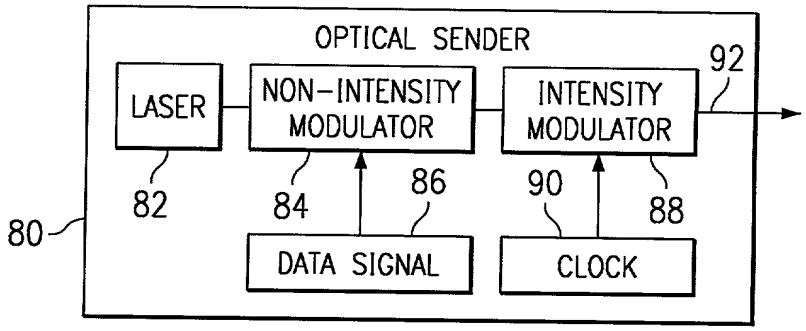


FIG. 5

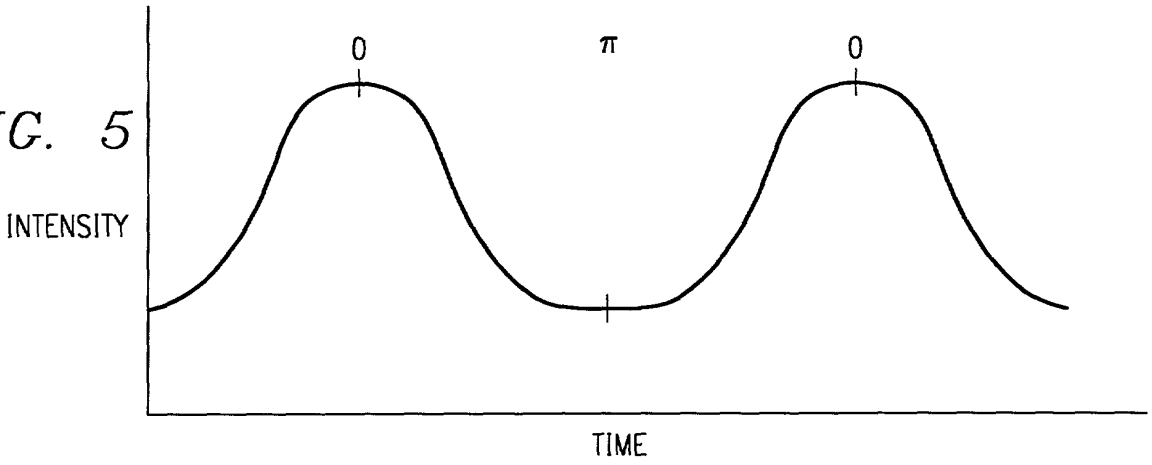


FIG. 6

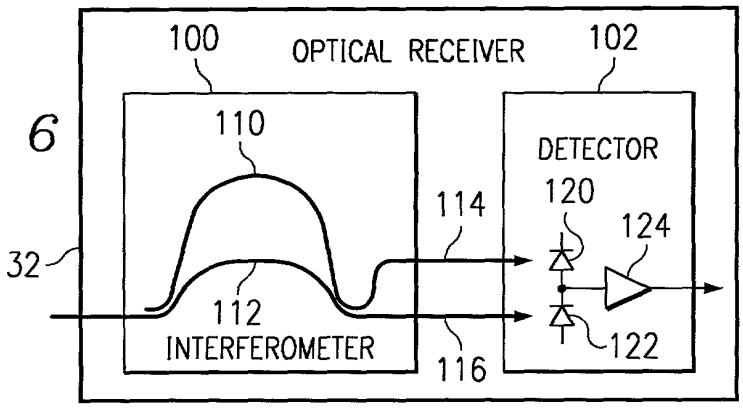


FIG. 7

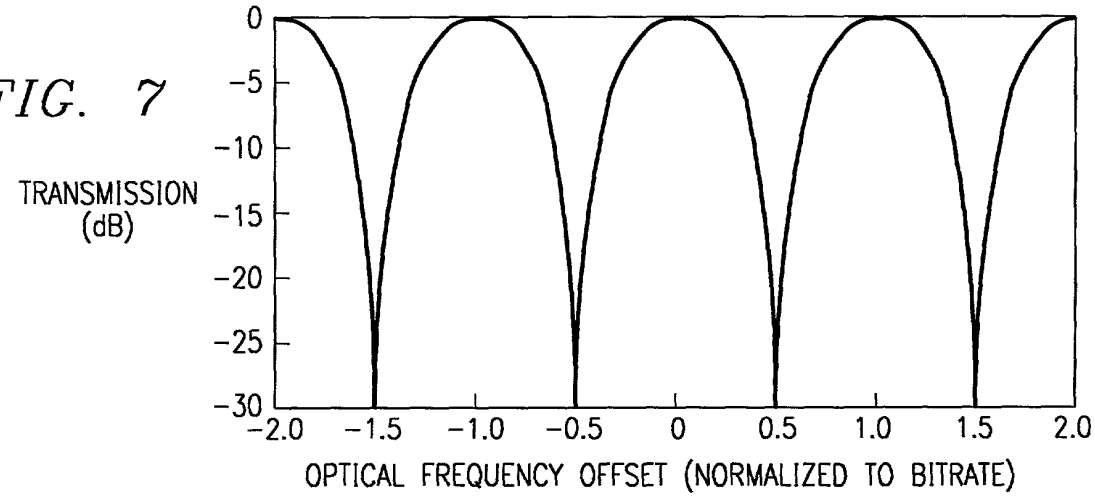
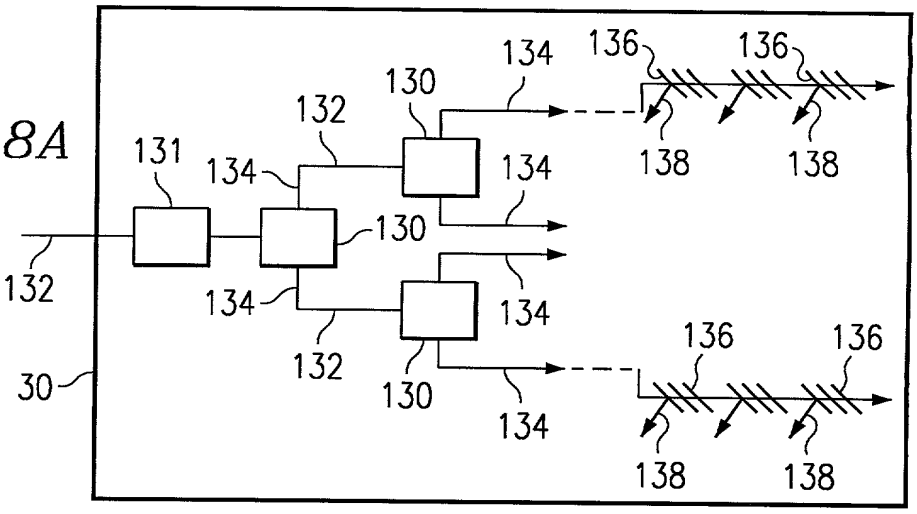


FIG. 8A



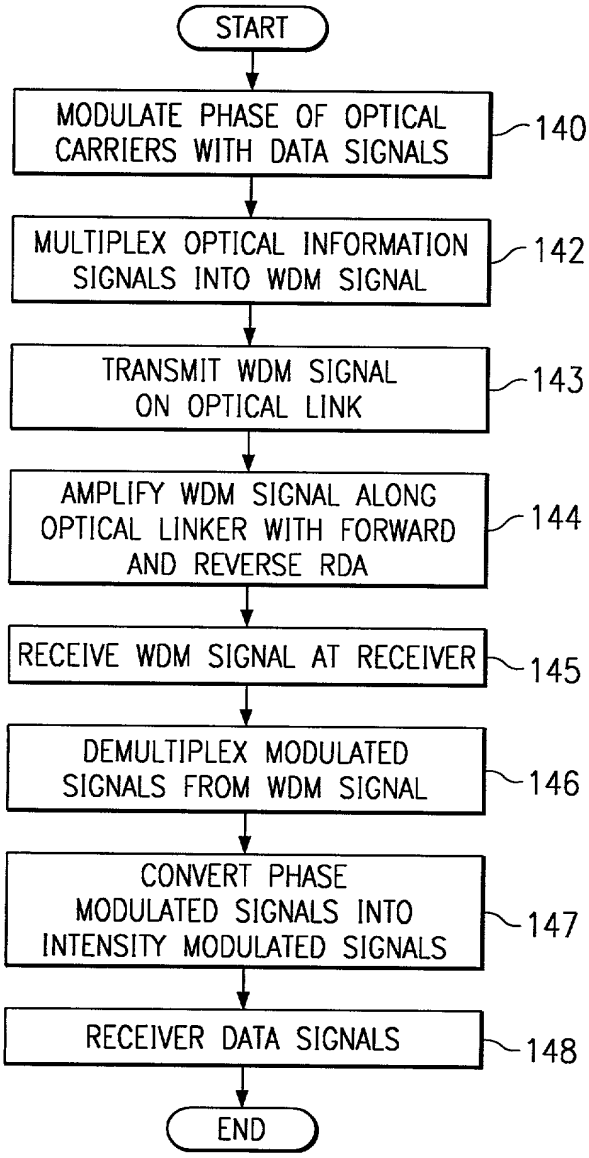


FIG. 9

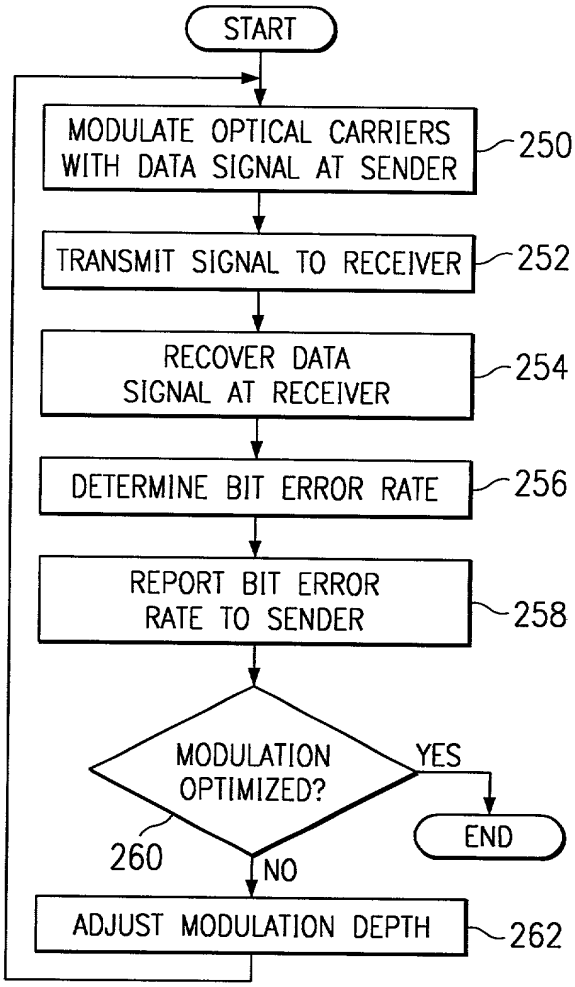


FIG. 13

FIG. 8B

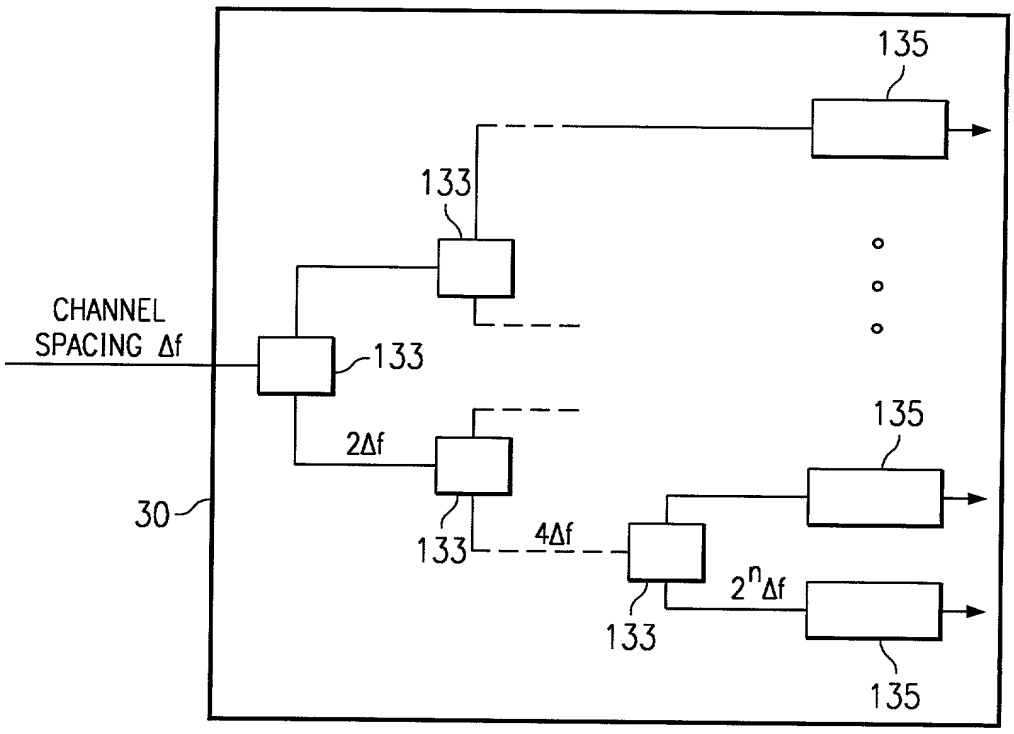
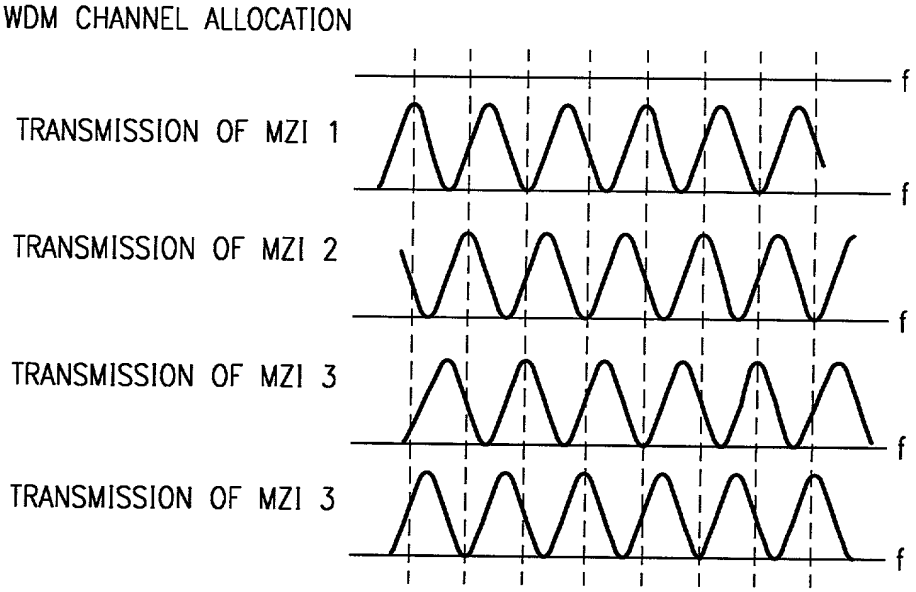

135
133
CHANNEL
SPACING Δf
133
135
2Δf
30
133
4Δf
2^nΔf
133
135

FIG. 8C


WDM CHANNEL ALLOCATION
TRANSMISSION OF MZI 1
TRANSMISSION OF MZI 2
TRANSMISSION OF MZI 3
TRANSMISSION OF MZI 3
f
f
f
f
f
f

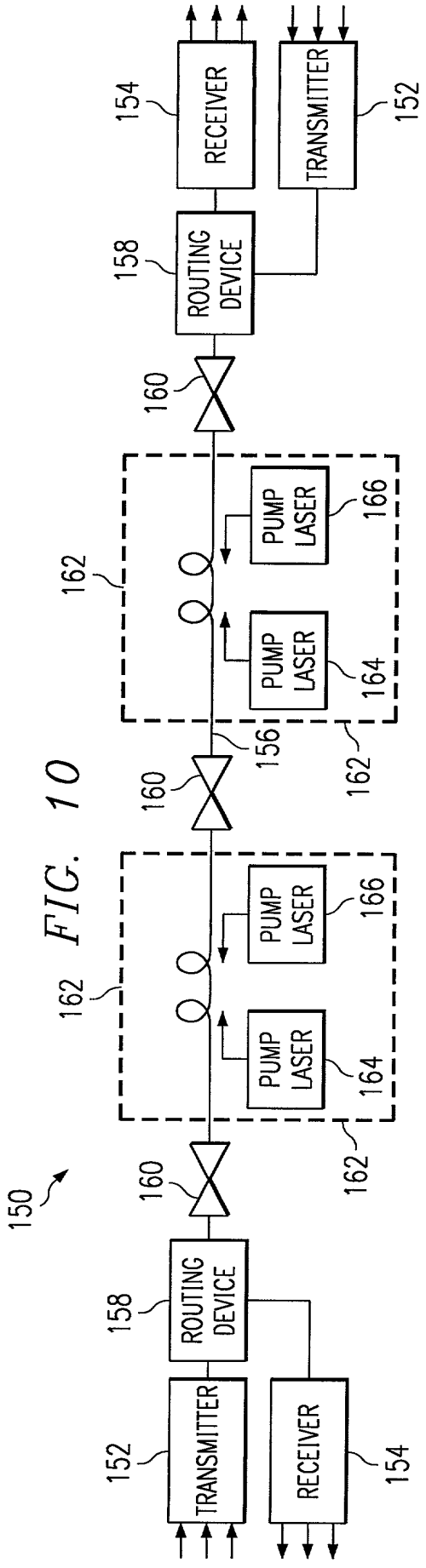

150
152
TRANSMITTER
154
RECEIVER
158
ROUTING DEVICE
160
162
PUMP LASER
164
166
156

FIG. 10

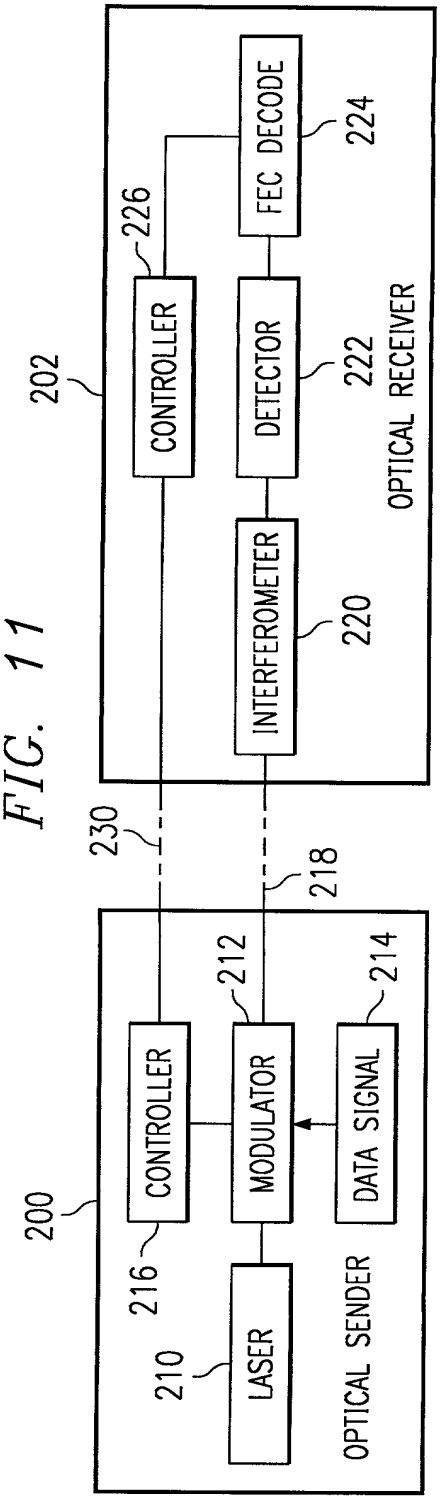

200
OPTICAL SENDER
202
OPTICAL RECEIVER
210
LASER
212
MODULATOR
214
DATA SIGNAL
216
CONTROLLER
218
220
INTERFEROMETER
222
DETECTOR
224
FEC DECODE
226
CONTROLLER
230

FIG. 11

FIG. 12

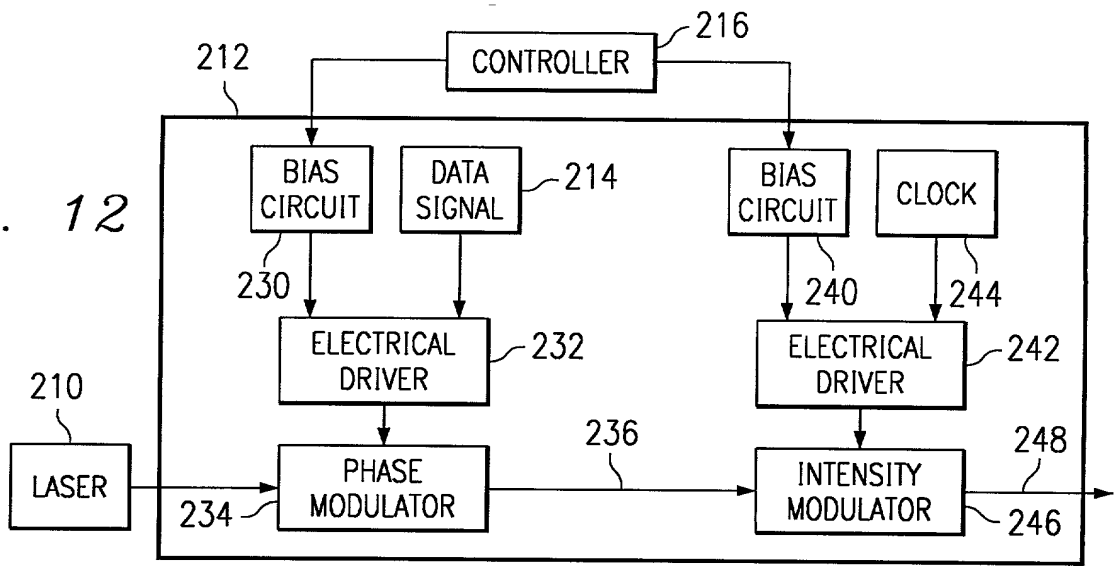


FIG. 14

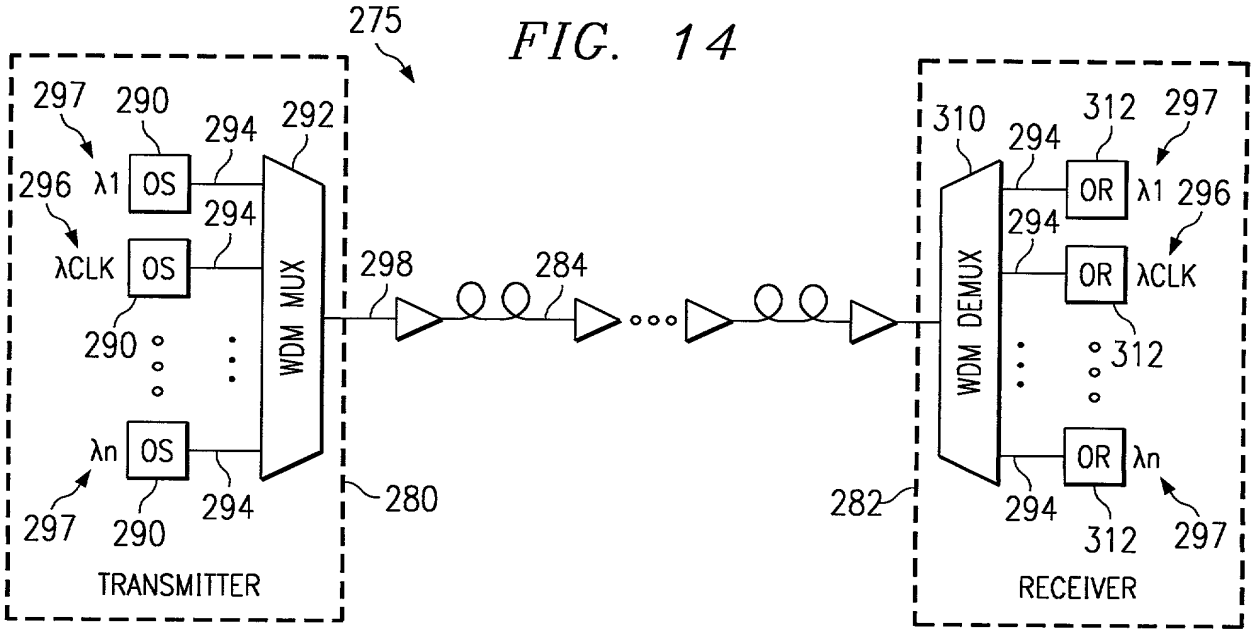


FIG. 15